## **ABSTRACT**

A method and system for authenticating devices in a network with particular discussion regarding Fibre Channel networks and switches. The method and system relate to mutual authentication between two connected ports. Generally, such two ports are connected by a medium dedicated exclusively to those ports. The method and system involve the exchange of authenticating information between the ports including host switch information, various encode or decode information, and secreting technique information such as encryption key information. Varying embodiments allow for full mutual authentication between two ports with a two, three or four phase exchange. Furthermore, by employing the authentication processes multiple times, full switching devices may be mutually authenticated.